

9.0 ENGINEERING

The GWF Energy LLC Henrietta Peaker Project (HPP) would be designed for high reliability and efficiency. The engineering standards and requirements are provided in Appendix H. The details of the transmission system design, including information on the safety and reliability of the transmission system, are provided in Section 6.0 (Electric Transmission) and Appendix A.

A detailed description of the HPP and its design and operation can be found in Section 2.0 (Project Description). Design and engineering information for the HPP is located throughout in this Application for Certification (AFC), as follows:

Power generation	Section 2.2.4 (Combustion Turbine Generators). Additional information is also contained in Appendix H.
Water supply system	The HPP would utilize water injection to reduce nitrogen oxide generation and water for evaporative inlet air cooling in the CTGs. Water would be supplied by the Westlands Water District and Kings County, as described in Section 2.2.7 (Water Supply and Use).
Atmospheric emission control system	Section 2.2.4.2 (Air Pollution Control Systems), Section 2.2.11 (Emissions Control and Monitoring), and Section 8.1 (Air Quality).
Waste disposal system	Section 2.2.9 (Waste Management), Section 8.13 (Waste Management), and Appendix H.
Noise abatement	Section 2.2.4.1 (Combustion Turbine Generator), Section 8.5 (Noise), and Appendix H.
Switchyard/transformer systems	Section 2.2.5 (Major Electrical Equipment and Systems), Section 6.0 (Electric Transmission), and Appendix H.
Transmission system design	Section 6.0 (Electric Transmission) and Appendix A.
Reliability	Section 2.4 (Facility Reliability).
Efficiency	Figures 2.2-4 and Appendix H.

Information regarding design measures to ensure safe facility operation is contained in Section 2.3 (Facility Safety Design). Applicable engineering laws, ordinances, regulations, and standards (LORS) are summarized in Appendix H. Throughout this AFC and Appendix H, references to the Uniform Building Code should be understood to be inclusive of the corresponding provisions of the California Building Code.

A geotechnical investigation of the HPP site was conducted, including foundation core borings, and is provided in Appendix H. Additional engineering information, including information on mechanical engineering, electrical engineering, civil engineering, structural engineering, system controls, and an equipment summary, is also contained in Appendix H.

The HPP will comply with all applicable LORS. A summary of the LORS is provided in the appropriate sections of Appendix H.

Involved Agency:

Agency	Contact/Title	Telephone
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